

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Patent Application of:

**Hans-Ulrich von Helmolt, *et al.***

Application No. 10/569,761

Filed: February 24, 2006

For: **A DATA PROCESSING METHOD,  
SYSTEM AND COMPUTER  
PROGRAM**

Examiner: Olusegun Goyea

Art Unit: 3687

Confirmation No.: 8060

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Commissioner For Patents  
P.O. Box 1450  
Alexandria, V.A. 22313-1450

**APPEAL BRIEF**

Dear Sir:

The Appellants submit the following Appeal Brief pursuant to 37 C.F.R. § 41.37(c) for consideration by the Board of Patent Appeals and Interferences. The Appellants authorize the amount of \$540.00 to cover the cost of filing the opening brief as required by 37 C.F.R. § 1.17(f) to be charged to Deposit Account No. 02-2666.

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## **I. REAL PARTY IN INTEREST**

Hans-Ulrich von Helmolt, Michael Picht, Volker Jaeck, and Juergen Seeburger are named as the inventors on the application. Hans-Ulrich von Helmolt, Michael Picht, and Juergen Seeburger transferred their rights in the subject application through an assignment executed on February 23, 2006, to SAP Aktiengesellschaft (“SAP AG”), a Corporation of Germany, having a principal place of business at Walldorf, Germany. Volker Jaeck transferred his rights in the subject application through an assignment executed on February 24, 2006, to SAP AG. The assignment was submitted to the USPTO on June 2, 2010. Accordingly, SAP AG is the real party in interest.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences that will directly affect, be directly affected by or have a bearing on the Board’s decision in this Appeal.

## **III. STATUS OF CLAIMS**

Claims 1-28 are pending in the Application. Claims 29 was cancelled. The Examiner has rejected claims 1-28. The Appellants respectfully appeal the rejection of claims 1-28.

## **IV. STATUS OF AMENDMENTS**

No amendments were submitted after the Final Office Action mailed on January 11, 2010.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Independent claim 1 recites a data processing method for a customer request comprising: receiving a request for an item from a customer data processing system at a central data processing system, wherein the request includes an item identifier associated with the item (see Specification, Page 17, lines 21-26 and FIG. 7, 700); generating a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items, wherein the sub-requests are assigned to a plurality of external or internal partner systems based on predefined rules (see Specification, Page 17, lines 21-26 and FIG. 7, 702); generating a separate unique identifier for each of the sub-requests (see Specification, Page 16, lines 1-11); storing the unique identifiers being assigned to the sub-requests, in a retrievable medium with the associated item by the central data processing system (see Specification, Page 16, lines 13-16 and FIG. 6, 672); sending the sub-requests with the unique identifiers to partner systems (see Specification, Page 17, Lines 28-30, Page 18, Lines

10-21 and FIG. 7, 710 and 720); receiving sub-responses at the central data processing system, each sub-response having a unique identifier that is the same as the unique identifier of the corresponding sub-request (see Specification, Page 17, Lines 28-32, Page 18, Lines 10-21 and FIG. 7, 712 and 722); matching the sub-response to the sub-request based on the unique identifiers (see Specification, Page 18, Lines 10-21); generating a response based on association of the sub-responses with the original item (see Specification, Page 18, Lines 4-21 and FIG. 7, 716 and 728); sending the response back to the customer data processing system (see Specification, Page 18, Lines 4-21 and FIG. 7, 718).

Dependent claim 6 recites the method of claim 5, wherein the partner system deletes the reservation for the requested resources unless the central data processing system sends a message if no acceptance is received from the customer within the predetermined time interval (see Specification, Page 12, Lines 11-17).

Independent claim 14 recites a central data processing system for processing of the customer request comprising: means for receiving the request for an item from a customer data processing system at a central data processing system, wherein the request includes an item identifier associated with the item (see Specification, Page 17, lines 21-26 and FIG. 7, 700); means for generating a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items, wherein each sub-request is assigned to an external or internal partner based on the predefined rules (see Specification, Page 17, lines 21-26 and FIG. 7, 702); means for generating a separate unique identifier for each of the sub-requests(see Specification, Page 16, lines 1-11); means for storing the unique identifiers being assigned to the sub-requests, in a retrievable medium with the associated item by the central data processing system (see Specification, Page 16, lines 13-16 and FIG. 6, 672); means for sending the sub-requests with the unique identifiers to the partner systems(see Specification, Page 17, Lines 28-30, Page 18, Lines 10-21 and FIG. 7, 710 and 720); means for receiving sub-responses at the central data processing system, each sub-response having a unique identifier that is the same as the unique identifier of the corresponding sub-request (see Specification, Page 17, Lines 28-32, Page 18, Lines 10-21 and FIG. 7, 712 and 722); means for the matching the sub-responses to the sub-requests based on the unique identifiers (see Specification, Page 18, Lines 10-21); means for generating a response based on association of the sub-responses with the original item (see

Specification, Page 18, Lines 4-21 and FIG. 7, 716 and 728); means for sending the response back to the customer data processing system (see Specification, Page 18, Lines 4-21 and FIG. 7, 718).

Independent claim 19 recites a computer-readable storage medium holding code to: receive a request for an item from a customer data processing system at a central data processing system, wherein the request includes an item identifier associated with the item (see Specification, Page 17, lines 21-26 and FIG. 7, 700); generate a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items, wherein each sub-request is assigned to an external or internal partner systems based on the predefined rules (see Specification, Page 17, lines 21-26 and FIG. 7, 702); generate a separate unique identifier for each of the sub-requests (see Specification, Page 16, lines 1-11); store the unique identifiers being assigned to the sub-requests with the associated item by the central data processing system, in a retrievable medium(see Specification, Page 16, lines 13-16 and FIG. 6, 672); send the sub-requests with the unique identifiers to partner systems (see Specification, Page 17, Lines 28-30, Page 18, Lines 10-21 and FIG. 7, 710 and 720); receive sub-responses at the central data processing system, each sub-response having a unique identifier that is identical to the unique identifier of the corresponding sub-request (see Specification, Page 17, Lines 28-32, Page 18, Lines 10-21 and FIG. 7, 712 and 722); matching the sub-responses to the sub-requests based on the unique identifiers (see Specification, Page 18, Lines 10-21); generate a response based on association of the sub-responses with the original item (see Specification, Page 18, Lines 4-21 and FIG. 7, 716 and 728); send the response back to the customer data processing system (see Specification, Page 18, Lines 4-21 and FIG. 7, 718).

Independent claim 20 recites, a data processing system for processing a request for an item, the data processing system comprising: means for selecting an asynchronous or a synchronous communication mode for communication with partner computer systems (see Specification, Page 17, lines 21-26 and FIG. 7, 702), means for splitting the request into a set of sub-requests, wherein each sub-request is for a sub-item of the item, each sub-item is mapped to the item based on an item identifier associated with the item and a sub-item identifier associated with the sub-item (see

Specification, Page 17, lines 21-26 and FIG. 7, 702), synchronous communication means being adapted to send a first one of the sub-requests of the set of sub-requests to one of the partner computer systems, wait for the respective sub-response from the one of the partner computer systems and send a second one of the sub-requests of the set of sub-requests to one of the partner computer systems after the sub-response has been received, wherein the sub-responses are stored in a random access memory with the associated item by the data processing system (see Specification, Page 17, Line 19 through Page 18, Line 27 and FIG. 7, 704, 708-716), asynchronous communication means being adapted to send the sub-requests in parallel to the partner computer systems, store respective sub-responses of the partner computer systems in a database on a non-volatile storage device with the associated item by the data processing system, means for combining the sub-responses to generate a response to the request (see Specification, Page 17, Line 19 through Page 18, Line 27 and FIG. 7, 706, 720-728), means for generating a first unique identifier for each of the sub-requests, the first unique identifiers are generated by the data processing system (see Specification, Page 16, lines 1-11); means for generating a second unique identifier for each of the sub-responses, the second unique identifiers are identical to the first unique identifier of the corresponding sub-request (see Specification, Page 16, lines 1-11); and means for sending the response, wherein generating the response to the request is performed by matching the sub-responses to the sub-requests based on the first and second unique identifiers (see Specification, Page 17, Lines 28-30, Page 18, Lines 10-21 and FIG. 7, 710 and 720).

Dependent claim 22 recites the data processing system of claim 21, wherein the means for splitting the request into a set of sub-requests uses the set of rules for the splitting operation (see Specification, Page 16, Lines 2-11 and FIG. 6, 610 and 618).

Dependent claim 22 recites the data processing method of claim 25, wherein a set of rules is used for selecting the asynchronous or the synchronous communication mode and for splitting the request into a set of sub-requests (see Specification, Page 16, Lines 2-11 and FIG. 6, 610 and 618).

Independent claim 25 recites a method for processing a request for an item comprising: selecting an asynchronous or synchronous communication mode for communication with partner

computer systems (see Specification, Page 17, lines 21-26 and FIG. 7, 702), splitting the request into a set of sub-requests by a central data processing system, wherein each sub-request is for a sub-item of the item and each sub-item is mapped to the item based on an item identifier associated with the item and a sub-item identifier associated with the sub-item (see Specification, Page 17, lines 21-26 and FIG. 7, 702), if the synchronous communication mode has been selected: sending a first one of the sub-requests of the set to one of the partner computer systems, waiting for the respective sub-response from the one of the partner computer systems, sending a second one of the sub-requests of the set to a second one of the partner computer systems after the sub-response from the first one of the partner computer systems has been received, wherein the sub-responses are stored in a random access memory with the associated item by the central data processing system (see Specification, Page 17, Line 19 through Page 18, Line 27 and FIG. 7, 704, 708-716), if the asynchronous communication mode has been selected: sending a plurality of the sub-requests in parallel to partner computer systems, storing respective sub-responses of the partner computer systems in a database on a non-volatile storage device with the associated item by the central data processing system (see Specification, Page 17, Line 19 through Page 18, Line 27 and FIG. 7, 706, 720-728), generating a first unique identifier for each of the sub-requests, each of the first unique identifiers are generated by the data processing system (see Specification, Page 16, lines 1-11); generating a second unique identifier for each of the sub-responses, each of the second unique identifiers are identical to the first unique identifier of the corresponding sub-request (see Specification, Page 16, lines 1-11); and combining the sub-responses to generate a response to the request, wherein generating the response to the request is performed by matching each sub-response to each sub-request based on the first and second unique identifiers (see Specification, Page 18, Lines 10-21); and sending the response to the requestor (see Specification, Page 17, Lines 28-30, Page 18, Lines 10-21 and FIG. 7, 710 and 720).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

In the Final Office Action dated January 11, 2010, the Examiner rejected claims 1-28.

Claims 1-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,249,044 issued to Kumar (hereinafter “Kumar”) in view of U.S. Patent No. 7,281,046 issued to Sunderasan *et al.* (hereinafter “Sunderasan”).

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumar in view of Sunderasan, as applied to claim 1 above, and further in view of U.S. Patent No. 5,649,103 issued to Datta *et al.* (hereinafter “Datta”).

Claims 14 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumar in view of Sunderasan.

Claims 16-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumar, as applied to claim 14 above, in view of Sunderasan and further in view of Datta.

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumar in view of Sunderasan.

Claims 20-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumar in view of Datta and further in view of Sunderasan.

Claims 25-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kumar in view of Datta and further in view of Sunderasan.

All of the claims do not stand or fall together. The basis for the separate patentability of the claims is set forth below.

## **VII. ARGUMENT**

### **A. Rejection of Claims 1-28 Under 35 U.S.C. § 103**

To determine obviousness of a claim: (1) factual findings must be made under the factors set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966); and (2) the analysis supporting the rejection under 35 U.S.C. § 103 should be made explicit and there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. See MPEP §§ 2141(II), 2141(III), and 2142; KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396; see e.g., MPEP § 2143 (providing a number of rationales which are consistent with the proper “functional approach” to the determination of obviousness as laid down in Graham).

However, as discussed below, the cited reference fails to teach or suggest each element of claims 1-28.

#### **1. Claims 1-5, 7-12, 14, 15, and 19.**

**a) Claims 1-5, 7-12, 14, 15, and 19 Are Patentable at Least Because the Combination of Kumar and Sunderasan Fails to Disclose Sub-**



**Items that are Mapped to Another Item Based on an Item Identifier  
and Sub-item Identifiers Associated with the Sub-Items.**

Claim 1 recites “receiving a request for an item from a customer data processing system at a central data processing system, wherein the request includes an item identifier associated with the item; generating a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items” (emphasis added). Claims 14 and 19 recite analogous elements. The Appellants respectfully submit that these elements of claim 1 are not disclosed by the combination of Kumar and Sunderasan.

Kumar discloses a system in which clients submit requests for products to a fulfillment server. See Kumar, Column 4, Line 42 through Column 5, Line 3. The requests include line-items which pertain to the products requested by the clients. See Id. Sub-requests may subsequently be generated for the products associated with each line-item. See Id. The fulfillment server may return sub-quotations responsive to the sub-requests. See Id. However, Kumar fails to disclose “generating a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items,” because the line-items of Kumar are not mapped to sub-items based on *identifiers* associated with the line-items such that sub-requests for these mapped sub-items can be generated. See Id. By failing to associate each sub-item to another item, the system of Kumar does not breakdown items into sub-items as recited in claim 1. Instead, the line-items of Kumar form the basis for the sub-requests without being mapped to sub-items with associated identifiers. See Id.

The only portion of Kumar that discloses mapping is related to mapping items to suppliers. Specifically, requested items are mapped to potential suppliers of these items. See Kumar, Column 15, Lines 46-57. However, mapping requested items to suppliers is not equivalent to mapping sub-items to requested items, because the mapping of Kumar does not involve a mapping between items within a hierarchy of items. Additionally, Kumar does not disclose that the mapping is implemented using identifiers, because Kumar is silent as to using identifiers to map requested items.

The Examiner argues that Kumar inherently discloses mapping sub-quotations to sub-requests using identifiers, but provides no rationale for this alleged inherency. See Advisory

Action, Page 2. To establish inherency, the descriptive matter must *necessarily* be present in the cited reference. See M.P.E.P. § 2112(IV). By failing to provide any reasoning, the Examiner has failed to establish inherency in accordance with M.P.E.P. § 2112(IV). Further, it is not necessary in Kumar to map sub-quotations to sub-requests as instead they may be associated with each other through a synchronous operation. For example, the fulfillment server may send out a sub-request and wait for a sub-quotation prior to sending out another sub-request. In this manner, sub-requests and sub-quotations are associated together without identifiers.

Additionally, claim 1 does not recite mapping sub-quotations to sub-requests. Instead, claim 1 recites that sub-items are mapped to items. Thus, whether or not Kumar discloses mapping sub-quotations to sub-requests is irrelevant, because these elements are not recited in the claim and are not argued by the Appellants.

Thus, for at least the reasons presented above, Kumar fails to disclose “generating a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items” as recited in claim 1. Furthermore, the Examiner has not cited and the Appellants have been unable to locate any sections of Sunderasan that cure the deficiencies of Kumar.

Thus, for at least the reasons presented above, the combination of Kumar and Sunderasan fails to teach or suggest each element of claim 1. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claim 1 be overturned.

Further, as mentioned above, claims 14 and 19 include elements analogous to those of claim 1. For at least the reasons discussed below in the Appellants’ argument over the 35 U.S.C. § 103 rejection of claim 1, the Appellants submit that the combination of Kumar and Sunderasan fails to teach or suggest each element of claims 14 and 19. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claims 14 and 19 be overturned.

Dependent claims 2-5, 7-12, and 15 depend from base claims 1 and 14, respectively and incorporate the limitations thereof. Thus, for at least the reasons discussed above in connection with the respective base claims, the Appellants submit that the combination of Kumar and Sunderasan fails to teach or suggest each element of claims 2-5, 7-12, and 15. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claims 2-5, 7-12, and 15 be overturned.

## **2. Claims 20, 21, 23-25, 27, and 28.**

### **a) Claims 20, 21, 23-25, 27, and 28 Are Patentable at Least Because the Combination of Kumar, Sunderasan and Datta Fails to Disclose Sub-Items that are Mapped to Another Item Based on an Item Identifier and Sub-item Identifiers Associated with the Sub-Items.**

Claim 20 recites “means for splitting the request into a set of sub-requests, wherein each sub-request is for a sub-item of the item, each sub-item is mapped to the item based on an item identifier associated with the item and a sub-item identifier associated with the sub-item” (emphasis added). Claim 25 recites analogous elements. The Appellants respectfully submit that these elements of claims 20 and 25 are not disclosed by the combination of Kumar, Sunderasan and Datta.

Claims 20 and 25 recite elements analogous to those of claim 1. For at least the reasons discussed above in relation to claim 1, the combination of Kumar and Sunderasan fails to disclose each element of claims 20 and 25. Additionally, the Examiner has not cited and the Appellants have been unable locate any sections of Datta that cure the deficiencies of Kumar and Sunderasan. Thus, for at least the reasons presented above, the combination of Kumar, Sunderasan and Datta fails to teach or suggest each element of claims 20 and 25 and these claims are separately patentable. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claims 20 and 25 be overturned.

Dependent claims 21, 23, 24, 27, and 28 depend from base claims 20 and 25, respectively and incorporate the limitations thereof. Thus, for at least the reasons discussed above in connection with the respective base claims, the Appellants submit that the combination of Kumar, Sunderasan and Datta fails to teach or suggest each element of claims 21, 23, 24, 27, and 28. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claims 21, 23, 24, 27, and 28 be overturned.

## **3. Claim 6.**

### **a) Dependent Claim 6 Depends from a Patentable Base Claim.**

Claim 6 depends from independent claim 1 and thus incorporates the respective limitations thereof. For at least the reasons discussed above regarding independent claim 1, the combination of Kumar and Sunderasan fails to teach or suggest each element of dependent claim 6. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claim 6

be overturned. Further, the Appellants believe that this claim is separately patentable for the reasons below.

**b) Dependent Claim 6 Is Patentable at Least Because the Combination of Kumar and Sunderasan Fails to Disclose a Partner System that Deletes a Reservation for Requested Resources.**

Claim 6 recites “the partner system deletes the reservation for the requested resources unless the central data processing system sends a message if no acceptance is received from the customer within the predetermined time interval” (emphasis added). The Appellants respectfully submit that these elements of claim 6 are not disclosed by the combination of Kumar and Sunderasan.

In rejecting claim 6, the Examiner cites paragraph column 13, lines 16-20 and column 17, lines 29-31 of Kumar to allegedly disclose these elements. See Final Office Action, Page 7. These sections of Kumar disclose a fulfillment server that updates a status field for an ATP request. See Kumar, Column 13, Lines 16-20 and Column 17, Lines 29-31. The status field may be updated to recite “acceptance not received” or “confirmation not received” when a quotation confirmation has not yet been received from a client. See Id. However, Kumar fails to disclose that a partner system deletes a reservation for requested resources, because Kumar is silent as to any action taking place at a partner system. Thus, Kumar fails to disclose “the partner system deletes the reservation for the requested resources unless the central data processing system sends a message if no acceptance is received from the customer within the predetermined time interval” as recited in claim 6.

Further, the Examiner has not cited and the Appellants have been unable to locate any sections of Sunderasan that cure the deficiencies of Kumar. Thus, the combination of Kumar and Sunderasan fails to teach or suggest each element of claim 6. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claim 6 be overturned.

**4. Claims 13 and 16-18.**

**a) Dependent Claims 13 and 16-18 Depend from Patentable Base Claims.**

Claims 13 and 16-18 depend from independent claims 1 and 14, respectively, and thus incorporate the respective limitations thereof. For at least the reasons discussed above regarding independent claims 1 and 14, the combination of Kumar and Sunderasan fails to teach or suggest

each element of dependent claims 13 and 16-18. Additionally, the Examiner has not cited and the Appellants have been unable to locate any sections of Datta that cure the deficiencies of Kumar and Sunderasan. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claims 13 and 16-18 be overturned.

## **5. Claim 22.**

### **a) Dependent Claim 22 Depends from a Patentable Base Claim.**

Claim 22 depends from independent claim 20 and thus incorporates the respective limitations thereof. For at least the reasons discussed above regarding independent claim 20, the combination of Kumar, Datta, and Sunderasan fails to teach or suggest each element of dependent claim 22. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claim 22 be overturned. Further, the Appellants believe that this claim is separately patentable for the reasons below.

### **b) Dependent Claim 22 Is Patentable at Least Because the Combination of Kumar, Datta, and Sunderasan Fails to Disclose Splitting Requests into a Set of Sub-Requests Using a Set of Rules.**

Claim 22 recites “wherein the means for splitting the request into a set of sub-requests uses the set of rules for the splitting operation” (emphasis added). The Appellants respectfully submit that these elements of claim 21 are not disclosed by the combination of Kumar, Datta, and Sunderasan.

In rejecting claim 22, the Examiner cites column 4, lines 42-50, column 7, lines 58-65, and column 11, lines 9-11 of Kumar to allegedly disclose these elements. See Final Office Action, Page 19. These sections of Kumar disclose clients that submit ATP requests to a fulfillment server. See Id. The fulfillment server turns the ATP requests into component ATP requests. See Kumar, Column 7, Lines 58-65. Thereafter, the fulfillment server brokers the component ATP requests to ATP servers based on predefined rules. See Id. However, Kumar fails to disclose that these rules are used to split the requests into sub-requests (*i.e.* turn the ATP requests into component ATP requests), because the rules are instead used to broker component ATP requests to ATP servers. See Id. Further, Kumar fails to disclose how the ATP requests are split up into component ATP requests, because Kumar is silent with respect to this operation. Thus, Kumar fails to disclose “wherein the means for splitting the request into a set of sub-requests uses the set of rules for the splitting operation” as recited in claim 22.

Further, the Examiner has not cited and the Appellants have been unable to locate any sections of Datta or Sunderasan that cure the deficiencies of Kumar. Thus, the combination of Kumar, Datta, and Sunderasan fails to teach or suggest each element of claim 22. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claim 22 be overturned.

## **6. Claim 26.**

### **a) Dependent Claim 26 Depends from a Patentable Base Claim.**

Claim 26 depends from independent claim 25 and thus incorporates the respective limitations thereof. For at least the reasons discussed above regarding independent claim 25, the combination of Kumar, Datta, and Sunderasan fails to teach or suggest each element of dependent claim 26. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claim 26 be overturned. Further, the Appellants believe that this claim is separately patentable for the reasons below.

### **b) Dependent Claim 26 Is Patentable at Least Because the Combination of Kumar, Datta, and Sunderasan Fails to Disclose Selecting an Asynchronous or Synchronous Communication Mode Using a Set of Rules.**

Claim 26 recites “wherein a set of rules is used for selecting the asynchronous or the synchronous communication mode and for splitting the request into a set of sub-requests” (emphasis added). The Appellants respectfully submit that these elements of claim 26 are not disclosed by the combination of Kumar, Datta, and Sunderasan.

In rejecting claim 26, the Examiner does not cite any particular sections of Kumar, Datta, and Sunderasan to allegedly disclose these elements. See Final Office Action, Page 21. It appears the Examiner is analogizing the emphasized elements of claim 26 with the elements of claim 21. Based on this assumption, the Examiner cites column 4, lines 35-38 and column 7, lines 58-65 to allegedly disclose these elements of claim 26. See Final Office Action, Pages 19 and 21. These sections of Kumar disclose a fulfillment server turns ATP requests into component ATP requests and brokers the component ATP requests to ATP servers based on predefined rules. See Kumar, Column 7, Lines 58-65. The ATP servers process these component ATP requests in an asynchronous or a synchronous manner. See Kumar, Column 4, Lines 35-38. However, Kumar fails to disclose that rules are used to select between an asynchronous and a synchronous mode, because the rules of Kumar are instead used to broker ATP requests to ATP

servers. See Id. Further, Kumar fails to disclose how an asynchronous and a synchronous mode are selected, because Kumar is silent with respect to this operation. Thus, Kumar fails to disclose “wherein a set of rules is used for selecting the asynchronous or the synchronous communication mode” as recited in claim 26.

Further, the Examiner has not cited and the Appellants have been unable to locate any sections of Datta or Sunderasan that cure the deficiencies of Kumar. Thus, the combination of Kumar, Datta, and Sunderasan fails to teach or suggest each element of claim 26. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claim 26 be overturned.

**c) Dependent Claim 26 Is Patentable at Least Because the Combination of Kumar, Datta, and Sunderasan Fails to Disclose Splitting Requests into a Set of Sub-Requests Using a Set of Rules.**

Claim 26 recites “wherein a set of rules is used for selecting the asynchronous or the synchronous communication mode and for splitting the request into a set of sub-requests” (emphasis added). The Appellants respectfully submit that these elements of claim 21 are not disclosed by the combination of Kumar, Datta, and Sunderasan.

In rejecting claim 26, the Examiner does not cite any particular sections of Kumar, Datta, and Sunderasan to allegedly disclose these elements. See Final Office Action, Page 21. It appears the Examiner is analogizing the emphasized elements of claim 26 with the elements of claim 22. Based on this assumption, the Examiner cites column 4, lines 42-50, column 7, lines 58-65, and column 11, lines 9-11 of Kumar to allegedly disclose these elements of claim 26. See Final Office Action, Page 19. These sections of Kumar disclose clients that submit ATP requests to a fulfillment server. See Id. The fulfillment server turns the ATP requests into component ATP requests. See Kumar, Column 7, Lines 58-65. Thereafter, the fulfillment server brokers the component ATP requests to ATP servers based on predefined rules. See Id. However, Kumar fails to disclose that these rules are used to split the requests into sub-requests (*i.e.* turn the ATP requests into component ATP requests), because the rules are instead used to broker component ATP requests to ATP servers. See Id. Further, Kumar fails to disclose how the ATP requests are split up into component ATP requests, because Kumar is silent with respect to this operation. Thus, Kumar fails to disclose “wherein a set of rules is used...for splitting the request into a set of sub-requests” as recited in claim 26.

Further, the Examiner has not cited and the Appellants have been unable to locate any sections of Datta or Sunderasan that cure the deficiencies of Kumar. Thus, the combination of Kumar, Datta, and Sunderasan fails to teach or suggest each element of claim 26. Accordingly, the Appellants respectfully request that the 35 U.S.C. § 103 rejection of claim 26 be overturned.



Based on the foregoing, the Board should **overturn** the rejection of all pending claims and hold that all of the claims currently pending in the application under review are allowable.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 6/20/2010

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## VIII. CLAIMS APPENDIX

The claims involved in this Appeal are:

1. (Previously Presented) A data processing method for a customer request comprising:
  - receiving a request for an item from a customer data processing system at a central data processing system, wherein the request includes an item identifier associated with the item;
  - generating a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items, wherein the sub-requests are assigned to a plurality of external or internal partner systems based on predefined rules;
  - generating a separate unique identifier for each of the sub-requests;
  - storing the unique identifiers being assigned to the sub-requests, in a retrievable medium with the associated item by the central data processing system;
  - sending the sub-requests with the unique identifiers to partner systems;
  - receiving sub-responses at the central data processing system, each sub-response having a unique identifier that is the same as the unique identifier of the corresponding sub-request;
  - matching the sub-response to the sub-request based on the unique identifiers;
  - generating a response based on association of the sub-responses with the original item;
  - sending the response back to the customer data processing system.
2. (Previously Presented) The method of claim 1, wherein said sending of the sub-requests to partner systems further comprises at least one of:
  - sending a sub-request for a partner search or a partner availability check at item level or;
  - determining at least one business system or an availability check for this system at item level.
3. (Original) The method of claim 2, wherein performing of the partner search is done with the use of functions.

4. (Original) The method of claim 3, wherein the functions comprise standard functions, as well as functions of customers and partners.

5. (Previously Presented) The method of claim 2, wherein the partner system which received the request for availability check temporarily reserves a requested resource that has been identified as available.

6. (Previously Presented) The method of claim 5, wherein the partner system deletes the reservation for the requested resources unless the central data processing system sends a message if no acceptance is received from the customer within the predetermined time interval.

7. (Previously Presented) The method of claim 1, wherein the request comprises a plurality of items, the method comprising performing the following operations for each item:

- receiving the request from the customer data processing system at the central data processing system;

- generating the plurality of sub-requests for the plurality of partner systems

- generating the separate unique identifier for each of the sub-requests;

- storing the unique identifiers being assigned to the sub-requests, in the retrievable medium with the associated item by the central data processing system;

- sending the sub-requests with the unique identifiers to partner systems;

- receiving sub-responses at the central data processing system

- matching the sub-response to the sub-request based on the unique identifiers; and

- generating the response based on association of the sub-responses with the original item.

8. (Previously Presented) The method of claim 7, wherein the request comprising the plurality of items is processed in a looping mode.

9. (Previously Presented) The method of claim 1, wherein the request for the at least one item has a structure of an order-like document that comprises:

- a header section;
- at least one item;
- at least one schedule line per item comprising information requested by the customer including a delivery date and a quantity.

10. (Previously Presented) The method of claim 1, wherein generating the plurality of sub-requests for a plurality of partner systems includes criteria defined by the customer.

11. (Previously Presented) The method of claim 1, further comprising the following operations conducted prior to sending the response back to the customer data processing system:

- comparing at least one sub-response to the preferred choice specified by a customer;
- selecting a preferred choice from the group consisting of the at least one sub-response.

12. (Original) The method of claim 11, wherein the act of selecting the preferred choice is based on the customer's preferences.

13. (Previously Presented) The method of claim 11, wherein asynchronous communication means are used and the sub-responses are aggregated in the database until all sub-responses have been received.

14. (Previously Presented) A central data processing system for processing of the customer request comprising:

means for receiving the request for an item from a customer data processing system at a central data processing system, wherein the request includes an item identifier associated with the item;

means for generating a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items, wherein each sub-request is assigned to an external or internal partner based

on the predefined rules ;

means for generating a separate unique identifier for each of the sub-requests;

means for storing the unique identifiers being assigned to the sub-requests, in a retrievable medium with the associated item by the central data processing system;

means for sending the sub-requests with the unique identifiers to the partner systems;

means for receiving sub-responses at the central data processing system, each sub-response having a unique identifier that is the same as the unique identifier of the corresponding sub-request;

means for the matching the sub-responses to the sub-requests based on the unique identifiers;

means for generating a response based on association of the sub-responses with the original item;

means for sending the response back to the customer data processing system.

15. (Previously Presented) The central data processing system of claim 14, wherein a central data processing system further comprises interfaces for communication between a sales system, the purchasing system, the manufacturing system, the planning system and other internal or external systems.

16. (Previously Presented) The system of claim 14, further comprising asynchronous communication means to use database tables for storage of the sub-responses.

17. (Original) The system of claim 16, wherein the means of generating a response based on association of the sub-responses with the original item and sending the response back to the customer data processing system, in case of the asynchronous communication, are applied only when all the requested sub-responses are collected in the database.

18. (Previously Presented) The system of claim 17, wherein the asynchronous communication means are to execute a query to determine if all necessary sub-responses have been collected.

19. (Previously Presented) A computer-readable storage medium holding code to:

receive a request for an item from a customer data processing system at a central data processing system, wherein the request includes an item identifier associated with the item;

generate a plurality of sub-requests for sub-items of the item, each of the sub-items are mapped to the item based on the item identifier and sub-item identifiers associated with the sub-items, wherein each sub-request is assigned to an external or internal partner systems based on the predefined rules ;

generate a separate unique identifier for each of the sub-requests;  
store the unique identifiers being assigned to the sub-requests with the associated item by the central data processing system, in a retrievable medium;

send the sub-requests with the unique identifiers to partner systems;  
receive sub-responses at the central data processing system, each sub-response having a unique identifier that is identical to the unique identifier of the corresponding sub-request;

matching the sub-responses to the sub-requests based on the unique identifiers;  
generate a response based on association of the sub-responses with the original item;  
send the response back to the customer data processing system.

20. (Previously Presented) A data processing system for processing a request for an item, the data processing system comprising:

-means for selecting an asynchronous or a synchronous communication mode for communication with partner computer systems,

-means for splitting the request into a set of sub-requests, wherein each sub-request is for a sub-item of the item, each sub-item is mapped to the item based on an item identifier associated with the item and a sub-item identifier associated with the sub-item,

-synchronous communication means being adapted to send a first one of the sub-requests of the set of sub-requests to one of the partner computer systems, wait for the respective sub-

response from the one of the partner computer systems and send a second one of the sub-requests of the set of sub-requests to one of the partner computer systems after the sub-response has been received, wherein the sub-responses are stored in a random access memory with the associated item by the data processing system,

- asynchronous communication means being adapted to send the sub-requests in parallel to the partner computer systems, store respective sub-responses of the partner computer systems in a database on a non-volatile storage device with the associated item by the data processing system, means for combining the sub-responses to generate a response to the request,

- means for generating a first unique identifier for each of the sub-requests, the first unique identifiers are generated by the data processing system;

- means for generating a second unique identifier for each of the sub-responses, the second unique identifiers are identical to the first unique identifier of the corresponding sub-request; and

- means for sending the response, wherein generating the response to the request is performed by matching the sub-responses to the sub-requests based on the first and second unique identifiers.

21. (Previously Presented) The data processing system of claim 20, wherein the means for selecting the asynchronous or synchronous communication mode comprises a set of rules to be applied on the request.

22. (Original) The data processing system of claim 21, wherein the means for splitting the request into a set of sub-requests uses the set of rules for the splitting operation.

23. (Previously Presented) The data processing system of claims 20, wherein the asynchronous communication means is to check the database for completeness for each incoming sub-response.

24. (Previously Presented) The data processing system of claim 23, wherein the asynchronous communication means is to perform the check of the database by performing a database query using the sub-request and sub-response identifiers as keys.

25. (Previously Presented) A method for processing a request for an item comprising:

- selecting an asynchronous or synchronous communication mode for communication with partner computer systems,
- splitting the request into a set of sub-requests by a central data processing system, wherein each sub-request is for a sub-item of the item and each sub-item is mapped to the item based on an item identifier associated with the item and a sub-item identifier associated with the sub-item,
- if the synchronous communication mode has been selected: sending a first one of the sub-requests of the set to one of the partner computer systems, waiting for the respective sub-response from the one of the partner computer systems, sending a second one of the sub-requests of the set to a second one of the partner computer systems after the sub-response from the first one of the partner computer systems has been received, wherein the sub-responses are stored in a random access memory with the associated item by the central data processing system,
- if the asynchronous communication mode has been selected: sending a plurality of the sub-requests in parallel to partner computer systems, storing respective sub-responses of the partner computer systems in a database on a non-volatile storage device with the associated item by the central data processing system,
- generating a first unique identifier for each of the sub-requests, each of the first unique identifiers are generated by the data processing system;
- generating a second unique identifier for each of the sub-responses, each of the second unique identifiers are identical to the first unique identifier of the corresponding sub-request; and
- combining the sub-responses to generate a response to the request, wherein generating the response to the request is performed by matching each sub-response to each sub-request based on the first and second unique identifiers; and
- sending the response to the requestor.

26. (Original) The data processing method of claim 25, wherein a set of rules is used for selecting the asynchronous or the synchronous communication mode and for splitting the request



into a set of sub-requests.

27. (Previously Presented) The data processing methods of claim 25, further comprising checking the asynchronous communication mode, checking the database for completeness with each incoming sub-response.

28. (Original) The data processing method of claim 27, wherein a database query is performed for each incoming sub-response, in order to determine whether all sub-responses for the request have been received.

29. (Cancelled)

## **IX. EVIDENCE APPENDIX**

Not Applicable.

## **X. RELATED PROCEEDINGS APPENDIX**

There are no other appeals or interferences that will directly affect, be directly affected by, or have a bearing on the Board's decision in this appeal.